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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/581,594 06/15/00 KUBOTA

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BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH VA 22040-0747

EXAMINER

BOLIVON, I

ART UNIT

PAPER NUMBER

1751
DATE MAILED:

09/27/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/581,594

Applicant(s)

KUBOTA ET AL.

Examiner

Lorna M. Douyon

Art Unit

1751

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 June 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4, 5, 6.
- 18) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other:

Art Unit:

Claim Objections

1. Claim 13 is objected to because of the following informalities: The term "keeping" (see third line from last) should be replaced with "kept". Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. Claims 2-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 2-4, the addition of the word "type" to an otherwise definite expression extends the scope of the expression so as to render it indefinite, see *Ex parte Copenhaver*, 109 USPQ 118 (Bd. App. 1955). See also MPEP 2173.05(b)(e).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit:

4. Claims 1-9, 11-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamashita et al. (US Patent No. 5,468,516), hereinafter "Yamashita '516".

Yamashita '516 teaches a process for producing nonionic detergent granules having a bulk density of from 0.6 to 1.20 g/ml (600 to 1200 g/l) which comprises mixing a detergent material comprising a nonionic surfactant, granulating the obtained mixture by agitating in an agitating mixer provided at the center position thereof with a rotation shaft having an agitation impeller wherein the agitation impeller agitates the mixture at a Froude number of from 1 to 4, and mixing the obtained granules with from 0.5 to 30 parts by weight of fine particles of a silicate compound having a mean primary particle size of 10 μm or less to thereby coat the surface of the granules with the fine particles, whereby the nonionic detergent granules have excellent granules have excellent powder fluidity and non-caking property (see claim 1). In Examples 7-10, Yamashita '516 exemplifies the preparation of nonionic detergent granules by adding 15 or 30 parts by weight nonionic surfactant to spray dried particulates having a bulk density of 0.70 or 0.43 g/ml and a mean particle size of 210 or 220 μm , agitating the mixture at a Froude number of 2.6, and thereafter adding 15 parts by weight Zeolite 4A having a primary particle size of 3 μm to produce nonionic detergent granules having a bulk density of 0.81, 0.72, 0.80 and 0.70, respectively and having a mean particle size in the range 390 to 420 μm (see Table 3 under cols. 23-24; col. 21, line 30 to col. 22, line 63). Yamashita '516 also teaches that the mixer is effected by an agitation impeller attached to the agitation shaft, by rotating spiral ribbon impeller in the fixed vessel, or by a mixing vessel provided with a screw inside the vessel in which mixing of materials is effected by

Art Unit:

the revolution of a rotating screw around an axis parallel to the vessel wall (see col. 5, lines 7-41). Yamashita '516 also teaches that in general, the temperature of the content in the agitating mixer ranges from 30° to 60°C (see col. 8, lines 27-30). Yamashita '516 also teaches that a binder may be added in amounts from 0.1 to 10 parts by weight, either at the time of mixing the detergent material or the time of granulating the mixture of the detergent material, the binder, for example being polyethylene glycol or polyoxyethylene alkyl ethers (see col. 13, lines 43-58). Even though Yamashita '516 does not explicitly disclose the spray dried particles having a surfactant-supporting ability of 20 ml/100g or more and the dissolution rate of the nonionic detergent granules of 90% or more, it should be inherent in the composition of Yamashita '516 to have the same characteristics because same process and ingredients having overlapping proportions have been utilized. Hence, Yamashita anticipates the claims.

5. Claims 1-13 are rejected under 35 U.S.C. 102(a) as being anticipated by Yamashita et al. (U.S. Patent No. 5,736,501), hereinafter "Yamashita '501".

Yamashita '501 teaches a method for producing nonionic detergent granules which comprises (I) blending 10 to 60 parts by weight in a total amount of at least one of nonionic surfactant and aqueous nonionic surfactant solution, and acid precursor of the anionic surfactant capable of having a lamellar orientation; 10 to 80 parts by weight of at least one of alkali builder and alkali, porous oil-absorbing carrier; 0 to 10 parts by weight of neutral or acidic builder; and 10 to 80 parts by weight of spray-dried particles (see col. 5, lines 45-53), wherein the spray-dried

Art Unit:

particles are obtained by spray-drying a water slurry containing one or more organic or inorganic builders (see col. 5, lines 22-25); (II) heating the mixture obtained in step (I) at least up to a temperature capable of neutralizing the acid precursor of the anionic surfactant in an agitating mixer and granulating while tumbling the agitating mixer thereby increasing a bulk density, to give nonionic detergent granules having a bulk density of from 0.6 to 1.0 g/ml (600 to 1200 g/l) (see abstract, col. 3, lines 43-60). Yamashita '501 also teaches that the mixer is effected by an agitation impeller attached to the agitation shaft, by rotating spiral ribbon impeller in the fixed vessel, or by a mixing vessel provided with a screw inside the vessel in which mixing of materials is effected by the revolution of a rotating screw around an axis parallel to the vessel wall (see col. 15, lines 8-40). Yamashita '501 also teaches that the agitating mixer equipped with agitating impellers is controlled such that the Froude number is from 1 to 4 (see col. 17, lines 30-48). In Example 10, Yamashita '501 exemplifies a process for the preparation of nonionic detergent granules having a bulk density of 0.75 g/ml (750 g/l) which process comprises agitating in a Lödige Mixer dense ash (average particle size: 290 μm), zeolite 4A and spray-dried granules (bulk density: 0.45 g/ml; average particle size: 245 μm), adding while agitating nonionic surfactant and fatty acid mixture to the mixer, and surface coating the detergent granules with zeolite 4A (see col. 25, line 53 to col. 26, line 5; Tables 4 and 6 under col. 27-28). Even though Yamashita '501 does not explicitly disclose the spray dried particles or builders having a surfactant-supporting ability of 20 ml/100g or more and the dissolution rate of the nonionic detergent granules of 90% or more, it should be inherent in the composition of Yamashita '501 to

Art Unit:

have the same characteristics because same process and ingredients having overlapping proportions have been utilized. Hence, Yamashita '501 anticipates the claims.

6. The PTO-1449 having a stamped date of June 15, 2000 containing 32 foreign patent documents have not been considered because no copies, mostly abstracts, have been submitted.

7. The prior art made of record and not relied upon is considered pertinent to applicants' disclosure. These references are considered cumulative to or less material than those discussed above.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lorna M. Douyon whose telephone number is (703) 305-3773. The examiner can normally be reached on Mondays-Fridays from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta, can be reached on (703) 308-4708. The fax phone number for this Technology Center is:

(703) 305-3599 - for Official After Final faxes

(703) 305-7718 - for all other Official faxes.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center receptionist whose telephone number is (703) 308-0661.

September 26, 2001

Lorna M. Douyon
Lorna M. Douyon
Primary Examiner
Art Unit 1751